

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/057,816
				Filing Date	January 24, 2002
				First Named Inventor	Ronald L. Mahany
				Group Art Unit	2618
				Examiner Name	Vo, Nguyen Thanh
				Attorney Docket No.	14419US01
Sheet	1	of	3		

U.S. PATENT DOCUMENTS

Examiner Initial*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	A32	4,809,257	02/28/1989	Gantenbein et al.	
	A33	5,197,061	03/23/1993	Halbert-Lassalle et al.	
	A34	4,890,332	12/26/1989	Takahashi	
	A35	4,069,392	01/17/1978	Goldenberg et al.	
	A36	4,931,250	06/05/1990	Grezczuk	
	A37	4,817,089	03/28/1989	Paneth	
	A38	3,745,464	07/10/1973	Lee	
	A39	4,578,820	03/25/1989	Highton	
	A40	4,620,114	10/28/1986	Moon	
	A41	5,054,111	10/01/1991	Goodwin	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	B14	JP 59-39150	03/03/1984	Ozaki		X
	B15	JP 63-252047	10/19/1988	Morimoto		X
	B16	JP 1-170147	07/05/1989	Yoshimoto		X
	B17	WO 90/133187	11/01/1990	Dahlin		
	B18	JP 63-184420	07/29/1988	Sakamoto		X

OTHER ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C119	Plaintiff Broadcom Corporation's Disclosure Of Asserted Claims And Final Infringement Contentions, <i>Broadcom Corp. v. Qualcomm Inc.</i> , Case No. 8:05-cv-467, United States District Court for the Central District of California, Exhibit B (pp. 5, 8 and 11), Alleged Admissions 1 and 2 (QPSK and 16QAM are distinct modulation "types"), and 3 (GMSK and 8PSK are distinct modulation "types"), Nov. 1, 2006.

EXAMINER SIGNATURE		DATE CONSIDERED	
-----------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. Send TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1800-786-9199) and select option 2.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary))

Sheet 2 Of 3

Complete if Known

Application Number	10/057,816
Filing Date	January 24, 2002
First Named Inventor	Ronald L. Mahany Error! Reference source not found.
Group Art Unit	2618
Examiner Name	Vo, Nguyen Thanh
Attorney Docket Number	14419US01

OTHER ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C120	Plaintiff Broadcom Corporation's Second Amended Disclosure Of Asserted Claims And Preliminary Infringement Contentions, <i>Broadcom Corp. v. Qualcomm Inc.</i> , Case No. 8:05-cv-467, United States District Court for the Central District of California, Exhibit C (pp. 8, 11 and 13), Alleged Admissions 4 and 5 (QPSK and 16QAM are distinct modulation "types"), and 6 (GMSK and 8PSK are distinct modulation "types"), Sep. 22, 2006.
	C121	Qualcomm's Preliminary Invalidity Contentions with Exhibits A-1 through A-35 and B-1 through B-22, <i>Broadcom Corp. v. Qualcomm, Inc.</i> , U.S. District Court for the Central District of California, Southern Division, SACV05-0467-JVS (RNBx), January 30, 2009.
	C122	BENICE, R.J. et al., "Adaptive Modulation and Error Control Techniques," IBM Corporation, 1966 (made available in 1977).
	C123	MAGAZANIK, USSR Author's Certificate No. 462292, published Feb. 28, 1975.
	C124	SALIKOV, USSR Description of Invention for Inventor's Certificate No. 1585902 A1, published Aug. 15, 1990.
	C125	ACAMPORA, A., "The Use of Resource Sharing and Coding to Increase Capacity of Digital Satellites," IEEE Journal of Selected Areas in Communications, Vol. SAC01, No. 1, Jan. 1983.
	C126	KHAN, M.H. et al., "Adaptive Forward Error Control for Digital Satellite Systems, IEEE Trans. On Aerospace and Electronic Systems Vol. AES-21, No. 4, pp. 547-58, July 1985.
	C127	CIMINI, JR., L. et al., "Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing, IEEE Transactions on Communications, v. 33, n. 7, pp. 665-75, July 1985.
	C128	ACAMPORA, A., "A Wireless Network for Wide-Band Indoor Communications, IEEE Journal on Selected Areas in Communications, Vol. SAC-1, No. 5, pp. 796-805, 1987.
	C129	BAIER, A., "Bit Synchronization and Timing Sensitivity in Adaptive Viterbi Equalizers for Narrowband-TDMA Digital Mobile Radio Systems, IEEE Vehicular Technology Conference, Vol. 38, pp. 377-84, June 1988.
	C130	GOODE, S.H., "A Comparison of Gaussian Minimum Shift Keying to Frequency Shift Keying for Land Mobile Radio," IEEE Vehicular Technology Conference, Vol. 34, pp. 136-41, May 1984.
	C131	GSM 05.04, July 15, 1988.
	C132	"Cellular System Mobile Station-Land Station Compatibility Specification," IS-3-D, Electronic Industries Association, March 1987.
	C133	HIRADE, K. et al., "Digital Transmission Technology for Mobile Radio Communication," Institute of Electronics, Information and Communication Engineers, February 1982.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/057,816
		Filing Date	January 24, 2002
		First Named Inventor	Ronald L. Mahany Error! Reference source not found.
		Group Art Unit	2618
		Examiner Name	Vo, Nguyen Thanh
Attorney Docket Number	14419US01		
Sheet	3	Of	3

OTHER ART -- NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C134	KORN, I., "GMSK with Limiter Discriminator Integrator Detection in Satellite Mobile Channel," IEEE Proceedings, Vol. 136, pt. 1, No. 5, pp. 361-366, Oct. 1989.
	C135	MALOBERTI, A., "Radio Transmission Interface of the Digital Pan European Mobile System," IEEE 39 th Vehicular Technology Conference, Vol. 2, pp. 712-17, May 1989.
	C136	MEYERS, R.A., et al., "Synthesiser Review for Pan-European Cellular Radio," Proc. IEEE Colloquium on VLSI Implementations for 2 nd Generation Digital Cordless Mobile Telecommunications Systems, 8/1 – 8/8, 1990.
	C137	THOMAS, C.M. et al., "A New Generation of Digital Microwave Radios for U.S. Military Telephone Networks," IEEE Transactions on Communications, Vol. COM-27, No. 12, pp. 1916-28, Dec. 1979.
	C138	Exhibits A-E of Plaintiff Broadcom Corporation's Preliminary Infringement Contentions for the '051 Patent and Related Cross-Claim, <i>Broadcom Corporation v. Qualcomm Incorporated</i> , Case No. SACV05-0467-JVS (RNBx), U.S. District Court for the Central District of California - Southern Division, January 9, 2009.

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.